Meeting Minute (by Chandra Bhat)

Subject: Booster Physics/Operations Group Telework Report-20200930

Date/Time: 20200930, 10:00 am

Attendee: D.E. Johnson, J. Johnston, V. Kapin, C. Bhat, C.Y. Tan

Speakers: C. Bhat, D.E. Johnson, J. Johnstone, V. Kapin

Report: Each one of the group members reported on their work during COVID-19 Telework period 8/6-9/30, 2020.

## C. Bhat: (CB-Report20200930.pptx)

Majority of the work carried out during this period were

- 1. PIP2-longitudinal beam dynamics simulations. Chandra is proposing gammaT back in Booster. Next week he may give a talk in PSP Taskforce meeting
- 2. 3.25" bore cavity resonance measurements and analysis
- 3. Booster beam study data analysis
- 4. literature survey/study
- 5. Chandra also presented plans for next month.

Tan: Commented that Robyn is going to give a talk on the 3.25" bore cavity resonance measurements. He wants the coupled mode digital dampers need to be investigated in view of any new finding from these measurements.

V. Kapin: (20200930\_Kapin\_telework\_summary\_06Aug-29Sep2020.pptx.pdf) Valery worked on

- RIL (LEBT+RFQ+MEBT) simulation preparations using CST, Trace3D, Parmila1 codes; LEBT collimator simulations is are new to him. He is doing literature study and code studies at this moment. He has been discussions with Kiyomi regarding these simulations. Kiyomi expects to add the scraper/iris as an upgrade sometime next year. Valery's simulations should be done by that time. He has to provide some specifications in advance.
- 2. 2SC: some modification is being suggested. Valery thinks that instead of two H&V pairs of rotatable primary collimators, have three pairs of primary collimators, but, only first pair is rotatable. Discussions are in progress with V. Sidorov.

Chandra and Tan: Suggested that a separate meeting should be setup by DEJ/Kapin inviting, V. Sidorov, Salah, Tan and Chandra to decide if three pair versus two pairs.

- 3. MAD-X simulations for new D magnet at Booster extraction. More work is in progress.
- 4. Continue progress on IPM ACL script and waiting for beam

In the coming months Valery will be working on all of the above.

## D. Johnson: (DEJ activities August 2020.pptx)

Dave's work was focused on

- 1. PIP-II management.
  - a. Injection absorber
  - b. Booster collimation
  - c. Longitudinal dampers
  - d. CHG0 detector cost/labor and schedule change
  - e. E4R girder in place and related activities/planning
  - f. PIP-II injection simulations.
- 2. Worked on modernization of LASER notcher. He is planning to install a new cavity to have more number of bounces during startup period.
- 3. Dave also presented his future plans for next month.

## J. Johnstone: (JJ-Monthly (September) Group Report.pdf)

(John has to leave in the middle of the meeting)

John's work was focused on

- 1. Angular distribution of H species from foil scattering developing exact analytic calculations
- 2. John has a new idea about changing gT of the current Booster ~9.5. He is working on that.